

Air Monitoring Summary Tables: Evacuation Zone

The tables below summarize preliminary air monitoring data collected using EPA AreaRAE Pro and DustTrak DRX instruments.

Project Name: Rockton Chemtool Fire ER
Date/Time: 06/18/21 16:28 to 06/19/21 04:09

Weather

Temperature: 57.2°, high of 93.2°
Wind Speed: 6 - 16 miles per hour
Wind Direction: South/Southwest
Conditions: Mostly Cloudy

Fixed Station: Facility North						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE Pro (S/N: 2412)	VOC (ppm)	1 ppm	No	8	0.00 to 0.04	0.02
	CO (ppm)	--	No	8	0.0 to 4.2	0.5
	O ₂ (%)	--	No	8	20.5 to 21.1	20.7
	H ₂ S (ppm)	0.1 mg/m ³	No	8	0.0 to 0.0	0.0

Fixed Station: Facility West						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE Pro (S/N: 2410)	VOC (ppm)	1 ppm	No	9	0.00 to 0.02	0.00
	CO (ppm)	--	No	9	0.0 to 0.0	0.0
	O ₂ (%)	--	No	9	19.5 to 20.9	20.6
	H ₂ S (ppm)	0.1 mg/m ³	No	9	0.0 to 0.0	0.0

Fixed Station: Facility East						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE Pro (S/N: 2413)	VOC (ppm)	1 ppm	Yes	10	0.05 to 0.08	0.07
	CO (ppm)	--	No	10	0.0 to 0.0	0.0
	O ₂ (%)	--	No	10	19.8 to 22.3	20.5
	H ₂ S (ppm)	0.1 mg/m ³	No	10	0.0 to 0.0	0.0

Fixed Station: Facility South						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE Pro (S/N: 2411)	VOC (ppm)	1 ppm	No	10	0.00 to 0.04	0.02
	CO (ppm)	--	No	10	0.0 to 4.2	0.4
	O ₂ (%)	--	No	10	20.5 to 21.8	20.9
	H ₂ S (ppm)	0.1 mg/m ³	No	10	0.0 to 0.0	0.0

Fixed Station #4: Corner of Union and Ferry						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	7	0.008 to 0.018	0.012
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	7	0.008 to 0.019	0.012
AreaRAE Pro (S/N: 2172)	VOC (ppm)	1 ppm	No	11	0.00 to 0.07	0.05
	CO (ppm)	--	No	11	0.0 to 0.1	0.0
	O ₂ (%)	--	No	11	20.1 to 20.4	20.3
	H ₂ S (ppm)	0.1 mg/m ³	No	11	0.0 to 0.0	0.0

Fixed Station #5: Stand alone area near stop sign on Chapel and Bridge St						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
AreaRAE Pro (S/N: 0640)	VOC (ppm)	1 ppm	No	11	0.00 to 0.08	0.05
	CO (ppm)	--	No	11	0.0 to 0.0	0.0
	O ₂ (%)	--	No	11	20.3 to 20.9	20.8
	H ₂ S (ppm)	0.1 mg/m ³	No	11	0.0 to 0.6	0.1
	HCN (ppm)	1 ppm	No	11	0.0 to 0.1	0.0

Fixed Station #6: Corner of Union and Chapel						
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of 1-Hour Periods	1-Hour Period Concentration Range	Average of All 1-Hour Periods
DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	No	9	0.002 to 0.021	0.012
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	9	0.002 to 0.022	0.013
AreaRAE Pro (S/N: 0643)	VOC (ppm)	1 ppm	No	12	0.00 to 0.01	0.00
	CO (ppm)	--	No	12	0.0 to 0.3	0.0
	O ₂ (%)	--	No	12	20.6 to 21.6	21.0
	H ₂ S (ppm)	0.1 mg/m ³	No	12	0.0 to 0.0	0.0
	HCN (ppm)	1 ppm	No	12	0.0 to 0.0	0.0

Comments						
Air monitoring measurements have been averaged over a 1-hour time period and summarized above.						
Start and stop times for each air monitoring instrument varies. The monitoring period is based on the earliest start time and latest stop time out of all units.						
1 - Chemtool Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR						
Notes:						
CO - Carbon Monoxide						
H ₂ S - Hydrogen Sulfide						
O ₂ - Oxygen						
ppm - Parts per million						
VOC - Volatile organic compounds						

Air Monitoring Summary Tables: Evacuation Zone

The tables below summarize preliminary air monitoring data collected using Handheld DustTrak, SPM Flex, and MultiRAE Pro instruments.

Date/Time: 6/18/2021 17:06 to 6/19/2021 6:36

Station EZ-01: 1101-1159 Innovation Dr					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	12	0.000 to 0.000
	HCN	1 ppm	No	12	0.000 to 0.000
	VOC (ppm)	1 ppm	No	12	0.000 to 0.040
SPM Flex	MDI (ppb)	5 ppb	No	9	0.000 to 0.6
	SO ₂ (ppb)	0.2 ppm	No	8	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	9	0.011 to 0.811
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	Yes	9	0.011 to 0.825

Station EZ-03: 860-998 N Prairie St					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	10	0.000 to 0.000
	HCN	1 ppm	No	10	0.000 to 0.000
	VOC (ppm)	1 ppm	No	10	0.000 to 0.050
SPM Flex	MDI (ppb)	5 ppb	No	7	0.000 to 0.5
	SO ₂ (ppb)	0.2 ppm	No	7	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	7	0.006 to 0.072
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	Yes	7	0.007 to 0.089

Station EZ-05: 907-1099 Watts Ave					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	8	0.000 to 0.000
	HCN	1 ppm	No	8	0.000 to 0.000
	VOC (ppm)	1 ppm	No	8	0.000 to 0.000
SPM Flex	MDI (ppb)	5 ppb	No	8	0.000 to 0.5
	SO ₂ (ppb)	0.2 ppm	No	8	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	8	0.005 to 0.053
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	8	0.006 to 0.062

Station EZ-06: 14632 S Bluff Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	8	0.000 to 0.000
	HCN	1 ppm	No	8	0.000 to 0.000
	VOC (ppm)	1 ppm	No	8	0.000 to 0.000
SPM Flex	MDI (ppb)	5 ppb	No	8	0.000 to 0.000
	SO ₂ (ppb)	0.2 ppm	No	8	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	8	0.005 to 0.040
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	8	0.009 to 0.045

Station EZ-07: 14728-14758 S Bluff Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	8	0.000 to 0.000
	HCN	1 ppm	No	8	0.000 to 0.000
	VOC (ppm)	1 ppm	No	8	0.000 to 0.000
SPM Flex	MDI (ppb)	5 ppb	No	8	0.000 to 0.500
	SO ₂ (ppb)	0.2 ppm	No	8	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	8	0.005 to 0.037
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	8	0.007 to 0.041

Station EZ-08: 1001-1199 Prairie Hill Rd					
Instrument	Analyte	Chemtool Public Health Screening Level ¹	Public Health Screening Level Exceeded?	Number of Measurements	Concentration Range
MultiRAE Pro	H ₂ S (ppm)	0.1 ppm	No	7	0.000 to 0.000
	HCN	1 ppm	No	7	0.000 to 0.000
	VOC (ppm)	1 ppm	No	7	0.000 to 0.000
SPM Flex	MDI (ppb)	5 ppb	No	7	0.000 to 0.500
	SO ₂ (ppb)	0.2 ppm	No	7	0.000 to 0.000
Handheld DustTrak	PM _{2.5} (mg/m ³)	0.025 mg/m ³	Yes	7	0.005 to 0.047
	PM ₁₀ (mg/m ³)	0.05 mg/m ³	No	7	0.007 to 0.044

Comments					
Start and stop times for each air monitoring instrument varies. The monitoring period is based on the earliest start time and latest stop					
1 - Chemtool Public Health Screening Levels are based on 1-hour time-weighted averages and were established by ATSDR.					

Notes:

CO - Carbon Monoxide

H₂S - Hydrogen Sulfide

O₂ - Oxygen

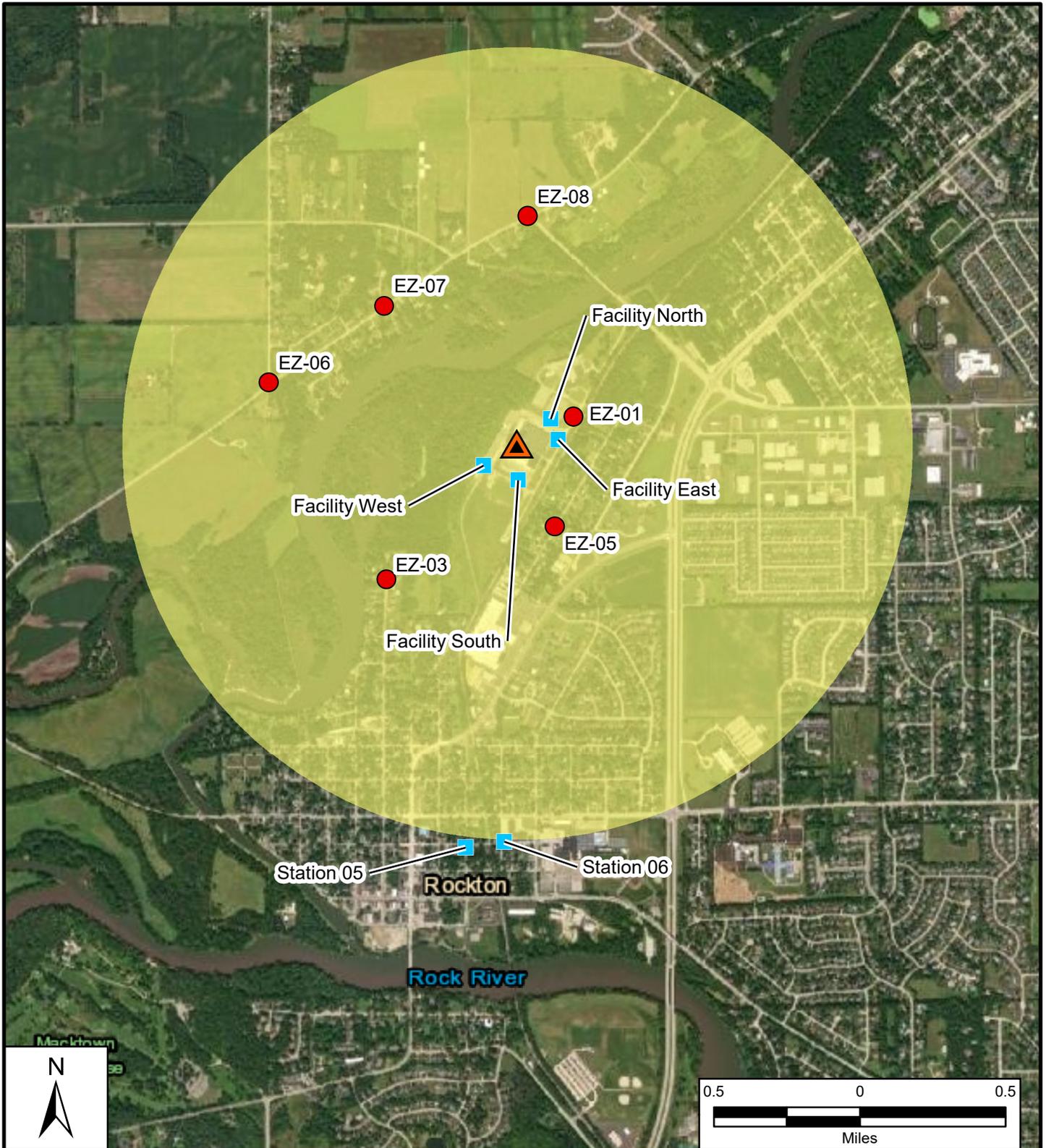
MDI - Methylene diphenyl diisocyanate

PM_{2.5} - particles that are 2.5 micrometers and smaller

PM₁₀ - particles that are 10 micrometers and smaller

ppm - Parts per million

VOC - Volatile organic compounds



Legend

- Evacuation Zone Monitoring Locations
- ▲ Fire Location
- EPA Air Monitoring Station
- 1 Mile Evacuation Radius

Note: Monitoring station locations subject to change based on weather and operational objectives

Rockton Chemtool Fire ER
Rockton, IL

Figure 1
Air Monitoring Stations
06/18/2021 16:28 to 06/19/2021 04:09



Prepared For: USEPA Prepared By: Tetra Tech Inc.